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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/637,211	08/08/2003	Peter J. Nashif	10541-1810	4072

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EXAMINER

SUTHERS, DOUGLAS JOHN

ART UNIT	PAPER NUMBER
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2615

MAIL DATE	DELIVERY MODE
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08/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/637,211	Applicant(s) NASHIF ET AL.	
	Examiner Douglas Suthers	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2615.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-9, 18-20, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuhara (US 2003/0053638 A1) in view of Langer (US 2002/0102949 A1).

4. Regarding claim 1, Yasuhara discloses an automotive multimedia entertainment system for an automotive vehicle having a plurality of audio output devices, the system comprising:

an audio system adapted to communicate with the plurality of audio output devices, the audio system having a first (front audio source) and second output channel (rear audio source);

a headphone including controls (paragraph [0038]);

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a wireless communication link providing audio signals to the headphone (from 3 to 13);

a wireless communication link for providing a set of control signals to the audio system (from 14 to 3);

a set of front speakers (10) and a set of rear speakers (11), said sets of front and rear speakers being in communication with the audio system, the audio system having a switch with first and second modes, in the first mode the switch connecting the set of rear speakers and the headphone to the first output channel (paragraph [0121]), in the second mode the switch deactivating the set of rear speakers and connecting the headphone to the second output channel (paragraph [0122]).

Yasuhara does not expressly disclose the controls being on the headphone.

Langer discloses a headphone including controls (figure 3 items 10 and 320), the controls adapted to configure an audio system; and

a two way wireless communication link (figure 2) providing audio signals to the headphone and providing a set of control signals to the audio system.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the headphone and controls of Langer in the system of Yasuhara. The motivation for doing so would have been have fewer items in the vehicle that could get misplaced, broken, or take up space. Therefore, it would have been obvious to combine Langer with Yasuhara to obtain the invention as specified in claim 1.

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5. Regarding claim 2, Yasuhara discloses wherein the first mode of the switch the controls can configure the first output channel (figure 8 item 72, can stop and play).
6. Regarding claim 3, Yasuhara discloses wherein the second mode of the switch the controls can configure the second output channel (figure 8 item 72, can stop and play).
7. Regarding claim 4, Langer discloses wherein the controls are located on the headphone (figure 3, items 12).
8. Regarding claim 6, Langer discloses wherein the headphone includes a transceiver (figure 2).
9. Regarding claim 7, Langer discloses wherein the transceiver is an infrared transceiver (paragraph [0010]).
10. Regarding claim 8, Langer discloses wherein the transceiver is a radio frequency transceiver (paragraph [0010]).
11. Regarding claim 9, Langer discloses the headphone embodied as a universal remote (paragraph [0009]). Although Langer does not expressly disclose ability to have multiple universal remote controls, the examiner takes official notice that the ability to

have multiple remote controls was well known in the art. The motivation to do so would have been to allow for a control for each user needing to control the devices, and allowing for replacements in case of damage or loss. Therefore at the time of invention, it would have been obvious to one of ordinary skill in the art to further comprising at least one additional headphone including controls adapted to configure the audio system, each additional headphone adapted to communicate the set of control signals over the two-way communication link such that the set of control signals from the headphone are interchangeable with the set of control signals from the at least one additional headphone.

12. Regarding claim 18, Yasuhara discloses a method for controlling an automotive multimedia entertainment system comprising the steps:

- transmitting an audio signal (figure 1) from a audio system to a set of front speakers (10) and a set of rear speakers (11);

- transmitting a control signal over a wireless communication link to the audio system (from 14 to 3);

- deactivating the rear set of speakers (paragraph [0122]); and

- transmitting an audio signal over a wireless communication link to the headphone (paragraph [0122]).

Yasuhara does not expressly disclose the controls being on the headphone.

Langer discloses transmitting a control signal from a headphone over a wireless communication link to the audio system (figure 2).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the headphone and controls of Langer in the system of Yasuhara. The motivation for doing so would have been have fewer items in the vehicle that could get misplaced, broken, or take up space. Therefore, it would have been obvious to combine Langer with Yasuhara to obtain the invention as specified in claim 18.

13. Regarding claim 19, Yasuhara discloses wherein the steps of deactivating of the rear set of speakers and transmitting an audio signal to the headphone occur simultaneously (paragraph [0122]).

14. Regarding claim 20, Langer discloses further comprising the step of generating a control signal in response to a control mounted to the headphone (figure 2 item 22).

15. Regarding claim 22, Langer discloses wherein the wireless communication link is an infrared wireless communication link (paragraph [0010]).

16. Regarding claim 23, Langer discloses wherein the wireless communication link is a radio frequency wireless communication link (paragraph [0010]).

17. Claims 5, 10-17, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuhara (US 2003/0053638 A1) in view of Langer (US 2002/0102949 A1), and Huemann et al. (US 5661811).

18. Regarding claim 5, Langer does not expressly disclose wherein the controls comprise a power control that changes modes.

Huemann discloses wherein headphone circuitry includes a power on control (figure 2 item 60) and the circuit is adapted to automatically change the audio system from speaker mode to headphone mode when the power on control is activated.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to the power switching of Huemann in the system of Yasuhara and Langer. The motivation for doing so would have been only have power used by the headphones when in use, thus minimizing power consumption and wasting batteries. Therefore, it would have been obvious to combine Huemann with Yasuhara and Langer to obtain the invention as specified in claim 5.

19. Regarding claim 10, Yasuhara discloses an automotive multimedia entertainment system for an automotive vehicle having a plurality of audio output devices, the system comprising:

- an audio system adapted to communicate with the plurality of audio output devices, the audio system having a first and second output channel (figure 9, channels of 91 and 92);

- a headphone including controls (paragraph [0038]);

- a wireless communication link for providing audio signals to the headphone (from 3 to 13);

a wireless communication link for providing a set of control signals to the audio system (from 14 to 3);

a set of front speakers (10) and a set of rear speakers(11), the sets of front and rear speakers being in communication with the audio system, the audio system having a switch with first and second modes, in the first mode the switch connecting the set of rear speakers and the headphone to the first output channel (paragraph [0121]), in the second mode the switch deactivating the set of rear speakers and connecting the headphone to the second output channel (paragraph [0121]).

Yasuhara does not expressly disclose the controls being on the headphone.

Langer discloses a headphone including controls (figure 3 items 10 and 320), the controls adapted to configure an audio system; and

a two way wireless communication link (figure 2) providing audio signals to the headphone and providing a set of control signals to the audio system.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the headphone and controls of Langer in the system of Yasuhara. The motivation for doing so would have been have fewer items in the vehicle that could get misplaced, broken, or take up space.

Langer does not expressly disclose wherein the controls comprise a power control that changes modes.

Huemann discloses wherein headphone circuitry includes a power on control (figure 2 item 60) and the circuit is adapted to automatically change the audio system from speaker mode to headphone mode when the power on control is activated.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to the power switching of Huemann in the system of Yasuhara and Langer. The motivation for doing so would have been only have power used by the headphones when in use, thus minimizing power consumption and wasting batteries. Therefore, it would have been obvious to combine Huemann with Yasuhara and Langer to obtain the invention as specified in claim 10.

20. Regarding claim 11, Yasuhara discloses wherein the first mode of the switch controls can configure the first output channel (figure 8 item 72, can stop and play).

21. Regarding claim 12, Yasuhara discloses wherein the second mode of the switch the controls can configure the second output channel (figure 8 item 72, can stop and play).

22. Regarding claim 13, Langer discloses wherein the controls adapted to configure the audio system are located on the headphone (figure 3, items 12).

23. Regarding claim 14, Langer discloses wherein the headphone includes a transceiver (figure 2).

24. Regarding claim 15, Langer discloses wherein the transceiver is an infrared transceiver (paragraph [0010]).

25. Regarding claim 16, Langer discloses wherein the transceiver is a radio frequency transceiver (paragraph [0010]).

26. Regarding claim 17, Langer discloses the headphone embodied as a universal remote (paragraph [0009]). Although Langer does not expressly disclose ability to have multiple universal remote controls, the examiner takes official notice that the ability to have multiple remote controls was well known in the art. The motivation to do so would have been to allow for a control for each user needing to control the devices, and allowing for replacements in case of damage or loss. Therefore at the time of invention, it would have been obvious to one of ordinary skill in the art to further comprise at least one additional headphone including controls adapted to configure the audio system, each additional headphone adapted to communicate the set of control signals over the two-way communication link such that the set of control signals from the headphone are interchangeable with the set of control signals from the at least one additional headphone.

27. Regarding claim 21, Langer does not expressly disclose wherein the controls comprise a power control that changes modes.

Huemann discloses wherein the step of deactivating the rear set of speakers and transmitting an audio signal to the headphones occurs automatically as the headphones are powered on. (figure 2 item 60) .

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At the time of the invention it would have been obvious to a person of ordinary skill in the art to the power switching of Huemann in the system of Yasuhara and Langer. The motivation for doing so would have been only have power used by the headphones when in use, thus minimizing power consumption and wasting batteries. Therefore, it would have been obvious to combine Huemann with Yasuhara and Langer to obtain the invention as specified in claim 21.

Response to Arguments

28. Applicant's arguments, see rule 131 affidavits, filed June 7th, 2007, with respect to the rejection(s) of claim(s) 1-23 under 35 USC 103 have been fully considered and are persuasive, and disqualify Wang (US 2004/0247138 A1) as prior art. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the Langer reference.

Conclusion

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Suthers whose telephone number is (571)272-0563. The examiner can normally be reached on 8am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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DQ



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